Farm Definition Matters for Statistics and Federal Programs

The definition of a farm is important for farm statistics and for the design and delivery of farm programs. In 2006, farmers received close to \$13 billion in various commodity program payments and another \$3 billion in conservation payments, for a total of nearly \$16 billion in direct payments from the Federal government. Farmers also received assistance from various indirect sources such as subsidized premiums for crop insurance, or credit assistance in the form of loan guarantees and subsidized interest rates for farm operating and ownership loans. Additionally, funding for agricultural research and extension services, as well as a handful of other Federal programs, is allocated across States in accordance with each State's share of the Nation's farm population. Rules must therefore be set to define farms and farmers and to determine program eligibility.

The diversity of U.S. farms complicates agricultural statistics as well as the design of Federal farm programs. A substantial number of farms produce very little output or sales. Many farm households have a small commercial farm business, but draw the bulk of their income, and devote the majority of their time, to nonfarm employment. At the other end of the size spectrum, very large farms often have multiple stakeholders, including some owners or shareholders who may provide substantial capital, but little on-farm labor or management.

Policymakers realize that U.S. farms cover a wide range of entities, and have attempted to limit some Federal agricultural payments to those operated by individuals deemed "actively engaged" in farming. While the term "actively engaged" has been used by some government agencies as a very precise term with explicit specific applications toward policy goals, others (including policymakers) have used the term in a broader sense to capture the spirit of the level of involvement of an individual, household, or entity in farming. In this report, the term is used in the latter sense (see box "What Does It Mean To Be "Actively Engaged?").

In an attempt to target commodity programs more effectively, legislators added eligibility restrictions to the 2008 Farm Act. Some aimed to exclude high-income individuals from participating in Federal farm programs. As defined, high-income individuals either generate average adjusted gross nonfarm income exceeding \$500,000, or average adjusted gross farm income in excess of \$750,000. Another provision excludes very small-scale operators. Beginning in the 2009 crop year, farmers with fewer than 10 base acres are barred from receiving direct, countercyclical, or average crop-election payments, unless the farmers qualify as either socially disadvantaged or limited-resource farmers.²

Although the income and base acre constraints were defined specifically to apply to direct Federal payments, since the limits remain high (for the income constraints) or low (for the base-acre constraints) the restrictions do not substantially limit eligibility. Some policymakers have sought to refine the idea of an "actively engaged" farmer.

²USDA defines a socially disadvantaged farmer, rancher, or agricultural producer as a member of a group whose members have been subjected to racial, ethnic, or gender prejudice due to belonging to the group, without taking into account the qualities of the individual. Groups that belong to this classification include women, African Americans, American Indians, Alaskan natives, Hispanics, Asian Americans, and Pacific Islanders. In 2003, USDA defined limited-resource farmers as those with direct or indirect gross farm sales of not more than \$100,000 in each of the previous 2 years (to be increased beginning in fiscal year 2004 to adjust for inflation using NASS's Prices Paid by Farmer Index), and having a total household income at or below the national poverty level for a family of four or less than 50 percent of the median household income of the county in each of the previous 2 years.

What Does It Mean To Be "Actively Engaged?"

The term "actively engaged" has both general, and very specific, implications. Congress requires farmers to be actively engaged in farming to be eligible for certain farm programs (such as the Conservation Reserve Program or various commodity programs). Originally written into law in Section 1001A of the Food Security Act of 1985, the provisions establishing the term "actively engaged" have been amended through subsequent farm bills. Putting aside clauses for special classes of individuals, the term "actively engaged" applies to either individuals or entities. As currently amended, an individual (or entity) is considered actively engaged in farming if the person (entity) makes a significant contribution (based on the total value of the farming operation) to the farming operation of capital, equipment, or land and a significant contribution of personal labor or active management (and, in the case of an entity, the collective contribution of personal labor or active management must be significant). Additionally, the individual's (entity's) share of profits/losses from the operation must be commensurate with the contributions of the individual (entity) to the farming operation. Finally, the individual's (entity's) contributions have to be deemed at risk, meaning that the individual (entity) would have to face the possibility of suffering a loss.

Although codified in law, these provisions in the current Farm Act remain relatively general in nature. In contrast, USDA's Farm Service Agency (FSA), a program agency tasked with using these general guidelines to establish rules to create measurable standards to enact the provisions effectively, has much more specific criteria to identify those "actively engaged" in farming. As written in the FSA Handbook 1-PL, to be considered "actively engaged," an individual is required to supply the lesser of 1,000 hours of labor per fiscal (or crop) year or half of the total hours necessary to conduct a farming operation comparable in size to the individual's (entity's) commensurate share in the farming operation. FSA imposes similarly specific restrictions on the contributions of capital, equipment, and land, while also helping to define what constitutes active personal management (a much more difficult concept to quantify).

Most generally, the term "actively engaged" encompasses the operator's level of involvement in the farming enterprise. Does the operator rely heavily on farming for a living? Does the operator devote a significant amount of labor to the operation? Or is the farm more of a hobby enterprise than a profit-oriented business? Policymakers are currently attempting to refine the broader definitions of a farmer to include a narrower, more measurable sense of "active engagement" to enable them to target some program payments more effectively. In this report, we use the most general sense of the term "actively engaged."

For example, in 2007 House Agriculture Committee Chairman Collin Peterson called for eliminating "nonfarmers" from receiving Federal payments (Abbott, 2007). He suggested raising the USDA sales limit used to define a farm from the \$1,000 limit currently in use to \$10,000 or \$50,000 (Good, 2008). During the debate over the now-enacted 2008 Farm Act, Sen. Tom Coburn (R-OK) in December 2007 argued that Federal payments should be limited to more narrowly defined farmers, and proposed that Environmental Quality Incentives Program (EQIP) payments should be restricted to farmers who generated at least two-thirds of their income from agriculture (Congressional Record, 2007). While these proposals surfaced in 2007, none of them were included in the 2008 Farm Act.

What Defines a Farm in USDA Statistics?

With the goal of capturing as much production as possible, the definition of a farm has changed multiple times since originally introduced. For the 1850 Census, a farm was defined as any establishment that sold at least \$100 worth

of agricultural goods. In 1870, a farm had to have at least \$500 worth of sales or more than three acres of productive land. By 1900, sales and acreage limits were dropped. Instead, the entire time of at least one individual needed to be devoted to the farm during the year. In 1925, when the agriculture census began to be taken every 5 years instead of every 10, the definition of a farm reverted to using an acreage/sales screen combination, this time requiring at least three acres of productive land or \$250 worth of agricultural sales.

In 1975, USDA, the Office of Management and Budget (OMB), and the U.S. Department of Commerce's U.S. Census Bureau agreed on a definition of a farm that is still in use today.³ "A farm is currently defined, for statistical purposes, as any place from which \$1,000 or more of agricultural goods (crops or livestock) were sold or normally would have been sold during the year under consideration" (Glossary, 2005). USDA's National Agricultural Statistics Service (NASS) also includes government payments as sales. In other words, a farm is defined as any place with any combination of sales, potential sales, and government payments totaling at least \$1,000.

The phrase "normally would" aims to ensure the inclusion of farms that do, or could, contribute to agricultural production, even if they did not have \$1,000 in sales. Farms might experience adverse events, such as droughts, hurricanes, fires, or disease that destroy the farm's production in a particular year (or several consecutive years). Some commodities require a long production cycle before sales are realized. For example, a new orchard will typically require several years before the trees mature and harvest can begin. Even for crops with annual production cycles, crops might be harvested and stored, with no sales recorded during a year. Current practice aims to include establishments with the capacity to realize at least \$1,000 in revenues from any combination of government payments, cropland, and/or livestock activities.

To identify farms that could normally produce at least \$1,000 worth of agricultural commodities, USDA uses a system that assigns specific point values for crop acreage and livestock inventory. Each assigned point represents \$1 in potential sales; any establishment with 1,000 points (\$1,000 of potential sales) is classified as a farm. In USDA statistics, such places are called "point farms" and are numerous, since many places could produce \$1,000 in sales from the cropland and livestock on the premises (see box, "How Large Is a Point Farm?"). Overall, using 2006 ARMS data, we estimate that there were approximately 440,000 point farms (over 20 percent of all farms). The newly released 2007 Census of Agriculture reports roughly 500,000 point farms. NASS created new methodologies to collect the data for this Census of Agriculture, designed to more accurately count small farms. While NASS believes that the new methodologies account for at least some of the increase in small farms reported, the new Census of Agriculture data suggest that almost 23 percent of all farms in the United States had the potential to generate at least \$1,000 worth of agricultural sales, yet did not do so (USDA/NASS, 2009).

Due to its broad, inclusive nature, the current USDA definition of a farm encompasses almost all organizations that produce agricultural goods, from small farms with very little or no production, to commercial farm businesses with sales in the millions of dollars. Such variation means that simple statistics of the agricultural sector can be misleading. Figures 1-7 show a range of farm sizes and provide a picture of farm structure useful for helping to refine the term "actively engaged."

³ In 1997, USDA's National Agricultural Statistics Service took over the Census of Agriculture duties from the U.S. Census Bureau.

How Large Is a Point Farm?

Small fields of crops or a few livestock animals allow agricultural operations to qualify as "point" farms under USDA's system. While hardly exhaustive, the following attributes would certify a rural establishment as a point farm in 2006:

- four acres of corn
- a little more than five and a quarter acres of soybeans
- eight and one-third acres of wheat
- one-third of an acre of tobacco
- one-tenth of an acre of berries
- just over one-third of an acre of vegetables
- one milk cow
- three beef cattle
- six hogs
- five horses or ponies

More than 80 percent of U.S. point farms fall into five main production categories:

- 1. 25 percent qualify as horse farms
- 2. another 20 percent have cattle or calves
- 3. approximately 17 percent grow hay or grasses, including farmland enrolled in the Conservation Reserve Program (CRP), a program designed to take environmentally sensitive (e.g., highly erodible) land out of production
- 4. a little more than 10 percent have a few acres of grains or oilseeds
- 5. 10 percent have sheep and goats

Note: The 2006 ARMS Phase III Survey Administration Manual contains information concerning point farm eligibility that allowed the calculation of these amounts of commodities.

How Are U.S. Farms Characterized?

Each year, the National Agricultural Statistics Service (NASS) and the Economic Research Service (ERS) jointly design and administer multiple surveys (collectively, the Agricultural Resource Management Survey, or ARMS) covering U.S. farming operations in the 48 contiguous States. The information in this report was obtained from the 2006 Phase III component of the survey, the most recent available data at the time the report was written. This survey collected detailed information relevant to the farm operation and the farm operator's household from 21,700 respondents. Additionally, the survey contains weights that take into account the sampling procedures used to create ARMS. These weights allow for the expansion of the data to estimate selected State and national level statistics.⁴ We describe how: gross sales; cash expenses; farm, household, and operator characteristics; household income, including off-farm income; acres operated; government payments; and conservation practices vary across U.S. farms. In turn, these structural descriptors can help us evaluate the coverage offered by various farm criteria and definitions.

⁴For more information on ARMS, see http://www.ers.usda.gov/Briefing/ARMS/.

Sales

In 2006, the mean sales of all U.S. farms were approximately \$106,000. However, because most farms are either very small or very large, very few farms actually had sales near this amount (fig. 1). While half of all farms generated sales of \$6,600 or less, fewer than 1 percent of all farms sold between \$100,000 and \$110,000 worth of goods.

In 2006, most farms did not produce or sell much output. Almost 1.2 million operations (nearly 58 percent of all farms) had sales of less than \$10,000 each, together producing only 1.5 percent of total farm sales in the U.S. (table 1). More than one in three of these farms were point farms, with less than \$1,000 in sales.

Another 385,000 farms generated sales between \$10,000 and \$50,000. Despite relatively low levels of individual sales, farms in this sales class generated approximately \$8 billion in total sales, or close to 4 percent of all agricultural sales in 2006.⁵

By contrast, just 1.7 percent of all farms generated nearly half of all agricultural sales in 2006. Fewer than 10 percent of farms sold at least \$250,000 worth of agricultural goods in 2006, yet these farms produced more than 75 percent of all U.S. gross agricultural sales.

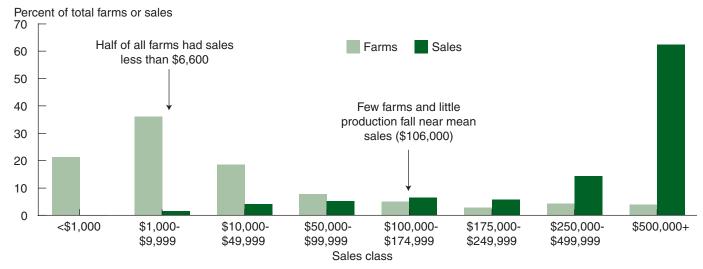
Expenses

To run the farm, operators incur many different costs including livestock and feed purchases, seed, fertilizer, and chemicals expenses, along with labor, fuel, maintenance, and utility costs and other miscellaneous expenses. In addition, fixed capital expenses for farm structures such as barns and sheds, fences, and equipment such as tractors and combines can be substantial. Together with taxes, interest and insurance expenses, and rental and lease

⁵A farm with sales between \$10,000 and \$50,000 is a fairly small operation. For example, at 2006 prices and yields, 143 acres of winter wheat would garner sales of \$25,000. Similarly, 95 acres of soybeans or 52 acres of corn (for grain) would also generate \$25,000 in sales. In terms of livestock, 264 head of hogs or 24 head of beef cattle at 2006 prices would be worth \$25,000. Since managing these small operations does not require 2,000 hours of labor over a year, this implies that a substantial number of operators farm on a part-time basis.

Figure 1

Distribution of farms and agricultural sales, 2006



payments, these costs combine to make up total cash expenses. USDA farm statistics aim to track aggregate expenses at the national and State levels.

In 2006, point farms incurred nearly 3 percent of all U.S. cash expenses (fig. 2, table 1). Most of the more than 440,000 farms falling in this category had very little, if any, production, and on average incurred few expenses. Despite selling very little, however, a substantial number did generate significant expenses. About one out of every three point farms incurred at least \$10,000 worth of expenses. Some of these operations, like those establishing orchards, expect to generate far more than \$1,000 in sales in the future.

Farms with less than \$10,000 in sales—including point farms—incurred 7.5 percent of all cash expenses in the United States; farms selling less than \$50,000 incurred 13.8 percent of all U.S. cash expenses. Even though contributing very little to the overall sales of agricultural products in the United States, these farms did contribute substantially to the costs incurred by the sector. Some of these farms may have large expenses relative to their sales (including the point farms) in an effort to take advantage of tax laws—incurring large costs to shield some (or all) of their income from taxation (Durst and Monke, 2001).

Occupation and labor allocation

While farm sales can vary widely from one farm to the next, individuals do not necessarily consider themselves farmers based on the level of sales they generate on the farm. One way to explore this issue is to look at self-reported data concerning occupation and labor allocation.

About 25 percent of operators on farms generating less than \$10,000 in sales considered farming their primary occupation in 2006 (fig. 3, table 1), while 8 percent of operators on farms generating less than \$10,000 in sales reported spending at least 2,000 hours of labor on the operation during the

⁶Of these farms, a small number (estimated at 3,800) had expenses between \$50,000 and \$100,000 while an additional few (2,100 operations) incurred expenses in excess of \$100,000. These farms may have encountered adverse conditions (e.g., bad weather, livestock losses to illnesses, etc.), may have been starting out and have long production cycles (e.g., orchards), or may have decided to store rather than sell their output.

Figure 2 Percent of sales and expenses by sales class, 2006

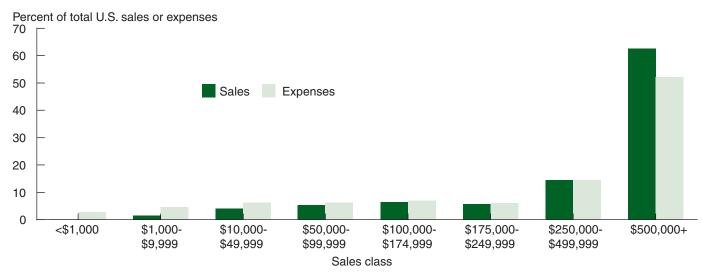


Table 1
Selected characteristics of farms and operators by sales class, 2006

	Sales class								
Item	Less than \$1,000	\$1,000 to \$9,999	\$10,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$174,999	\$175,000 to \$249,999	\$250,000 to \$499,999	\$500,000 or more	All
					Number				
Total farms	444,763	753,812	384,985	163,630	105,203	60,064	90,239	80,978	2,083,674
				Pei	cent of U.S.	total			
Distribution of:									
Farms	21.3	36.2	18.5	7.9	5.0	2.9	4.3	3.9	100.0
Gross sales	0.0	1.5	4.1	5.3	6.4	5.7	14.4	62.5	100.0
Cash expenses	2.8	4.7	6.3	6.3	7.0	6.1	14.5	52.1	100.0
Acres operated	3.5	9.6	14.6	12.7	11.3	7.9	16.0	24.4	100.0
Government	0.5	0.0	14.0	12.7	11.0	7.0	10.0	27.7	100.0
payments	0.2	6.6	11.4	9.8	10.0	8.6	20.5	32.9	100.0
Conservation	0.6	25.7	27.9	13.5	7.0	3.9	9.5	11.9	100.0
Commodity-	0.0	20.7	21.0	10.5	7.0	0.0	0.0	11.5	100.0
related	0.1	1.9	7.4	8.9	10.7	9.7	23.2	38.0	100.0
CRP or WRP	0.1	1.0	7.1	0.0	10.7	0.7	20.2	00.0	100.0
acres	0.9	34.0	29.8	13.3	5.3	4.3	6.9	5.4	100.0
	0.0	00	_0.0		0.0		0.0	0	
				A	Acres operat	ted			
Median acres									
operated	30	68	164	310	423	640	825	1,200	100
					Percent				
DI (reiceni				
Share of acres operated owned									
by operation	101.3	110.5	73.5	69.2	54.3	41.6	44.5	51.3	62.7
by operation	101.0	110.5	70.0	00.2	34.0	71.0	44.0	31.0	02.7
				P	ercent of gro	oup			
Operator age 65									
or more	21.1	33.8	34.3	29.7	17.2	17.9	16.0	14.3	28.1
Onnumetica.									
Occupation:	10.0	00.0	40.0	CO 0	70.4	00.7	01.5	00.0	40.5
Farm/ranch work	19.8	29.0	48.8	69.9	79.4	90.7	91.5	96.0	43.5
Other work	63.4	55.5	43.2	24.3	d	8.5	7.9	3.6	45.1
Not in workforce	16.8	15.5	8.0	a5.8	d	na	na	0.4	11.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Principal operator									
retired	23.7	27.5	19.5	11.1	4.1	2.4	*3.0	2.6	20.0
lavina of famos visule (fe									
Hours of farm work (fo			40.5	0.0	*= 0		0.0		04.4
Less than 500	33.0	29.9	12.5	6.2	*5.9	na 4.0	0.9	1.1	21.1
500 to 999	36.2	31.9	20.4	11.4	4.8	4.0	*5.1	2.4	24.6
1,000 to 1,499	17.4	18.7	23.4	16.3	9.5	4.9	5.4	4.4	17.1
1,500 to 1,999	4.8	11.7	15.8	14.7	10.1	7.9	6.1	4.5	10.5
		7.7	27.8	51.4	69.7	81.8	82.4	87.7	26.6
2000 or more	8.4								
	8.4 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

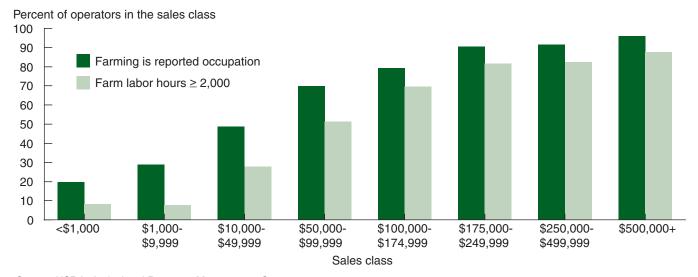
 $^{^{\}star}$ indicates that coefficient of variation (CV) is greater than 25 and less than or equal to 50. a indicates that CV > 50.

na indicates value is not available due to no observations, an undefined statistic, or reliability concerns.

d means cannot be disclosed due to confidentiality restrictions.

Figure 3

Principal operator's reported occupation and labor hours, 2006



Source: USDA, Agricultural Resource Management Survey, 2006.

year, the equivalent of a full-time job (40 hours per week for 50 weeks). In contrast, almost 1 out of every 2 operators on farms with between \$10,000 and \$50,000 in sales considered themselves farmers, with over 40 percent spending at least 1,500 hours of labor on the farm. On farms generating at least \$50,000 in sales, the operator typically considered farming as the primary occupation and reported working at least 2,000 hours on the farm during the year.

How much do different households rely on farm income?

Farm households with low levels of agricultural sales tend to report relatively high levels of off-farm income. However, households associated with farms generating the very highest levels of agricultural sales often generate off-farm income as well.

Operators and their households can generate off-farm income from both earned and unearned sources. Earned off-farm income comes from self-employment or wages and salaries at a job unrelated to the farm. Households obtain off-farm unearned income from passive income sources unrelated to their farming enterprise, such as Social Security or interest earnings. Total household income combines earned and unearned incomes with the household's net income (revenues minus costs) derived from the farming operation.⁸

Farm households selling less than \$50,000 worth of agricultural goods had mean off-farm income exceeding \$70,000, while households of the largest farms (those with sales above \$250,000) averaged between \$50,000 and \$60,000 in off-farm income (fig. 4, table 2). More significantly, the share of off-farm income from earned sources dropped as farms increased in size. The average amount of earned off-farm income for farm households with less than \$50,000 in sales was almost twice the amount of earned off-farm income generated by the households of the largest farms in 2006. This is likely due to the fact that as farms grow (both in size and complexity), the

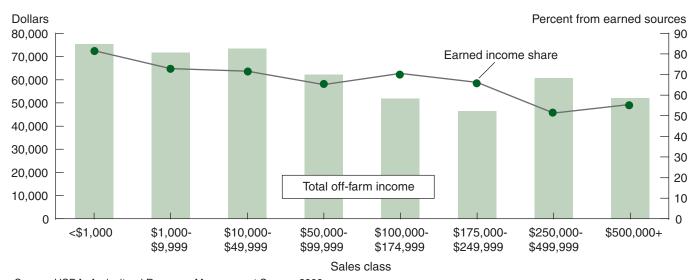
⁷The ARMS questionnaire asks the principal operator how many hours, on average, the respondent worked on the farm per week for each of the four quarters of the year (January through March, April through June, July through September, and October through December). Adding up the hours per week provided the values shown in table 1.

⁸The ARMS survey contains several questions concerning the off-farm income of the principal operator. Respondents were asked to enter value codes representing ranges of income that corresponded to the income they derived from any sources not affiliated with their operation. Midpoints of each range were subsequently used for each value code to obtain estimates for each variable. Earned off-farm income was calculated using responses concerning any off-farm businesses of the members of the operator's household during the year and from any wages or salaries earned from any off-farm jobs. Respondents were also asked to enter value codes for any unearned income, consisting of any passive income sources such as interest, dividends, Social Security, etc.

operators, and perhaps other household members, have to devote more time to running the farm business, leaving less time to earn wages or generate revenues off the farm. Reported labor hours in the ARMS data suggest this trend as well. As farm size increases from small farms to those producing at least \$100,000 in sales, operators tend to spend more hours working on the farm. Their spouses also appear to increase their on-farm labor as farm size increases. Hours spent earning off-farm income decrease steadily for operators, and more slowly for their spouses, as farm size increases.

Households of the largest farms relied more on farm income than did the households of smaller farms (fig. 5, table 2). In fact, more than 58 percent of the commercial farm households (those with farms selling \$250,000 or more) earned at least half of their income from farming. In contrast, a large majority of low-sales operators did not rely upon farming for any of their income at

Figure 4 **Off-farm income, 2006**



Source: USDA, Agricultural Resource Management Survey, 2006.

Figure 5 Household reliance on farm income, 2006

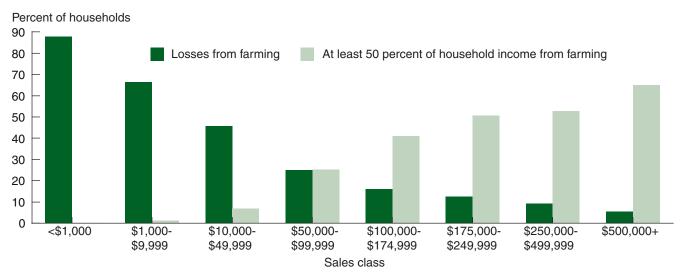


Table 2
Selected financial characteristics of farm households by sales class, 2006

	Sales class									
ltem	Less than \$1,000	\$1,000 to \$9,999	\$10,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$174,999	\$175,000 to \$249,999	\$250,000 to \$499,999	\$500,000 or more	All	
					Number					
Total farm households	439,175	739,582	374,663	155,871	98,946	56,191	86,182	71,890	2,022,501	
	Dollars per household									
Median household income	54,835	52,299	53,937	52,038	58,184	65,334	86,228	121,705	54,835	
Mean household income	68,480	68,171	72,841	69,375	74,163	74,908	103,864	249,815	77,654	
Farm earnings	-6,914	-3,529	a-574	7,229	22,361	28,260	43,226	197,666	8,406	
Off-farm income	75,394	71,701	73,416	62,146	51,802	46,647	60,638	52,150	69,248	
Earned	61,480	52,240	51,625	40,484	36,556	30,868	31,143	28,985	50,140	
Unearned	13,915	19,461	21,791	21,662	15,246	15,779	*29,495	23,165	19,109	
				Per	cent of hous	seholds				
Positive household incon	ne and:									
Loss from farming	87.7	66.4	45.8	25.1	16.0	12.6	9.3	5.5	55.4	
0-24 percent from farming	6.3	24.4	31.5	21.1	14.1	7.9	8.1	5.9	19.2	
25-49 percent from farming	na	3.3	10.6	19.2	17.7	15.1	13.5	8.6	7.0	
50-74 percent from farming	na	0.8	3.8	15.1	17.1	22.0	18.8	14.3	5.3	
75 percent or more from farming	na	*1.2	3.1	10.3	24.0	28.8	34.1	50.8	7.2	
Negative household income	*3.0	3.9	5.2	9.2	11.0	13.6	16.2	15.0	5.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

^{*} indicates that coefficient of variation (CV) is greater than 25 and less than or equal to 50.. a indicates that CV > 50.

Source: USDA, Agricultural Resource Management Survey, 2006.

all. Over two-thirds of farm households with less than \$50,000 in agricultural sales incurred losses from farming.⁹ Furthermore, an additional 20 percent of farm households in this sales category derived less than one quarter of their income from their farming operation.

However, off-farm income does remain important even for those associated with commercial farms. More than one in four commercial farm households obtained over half of their household income from off-farm sources. Losses from farming and negative household income are not uncommon, even for operators of the very largest farms. More than one in five farms with at least \$500,000 in sales either had negative household income or incurred losses from farming, as had one-quarter of all farms with sales between \$250,000 and \$500,000 in 2006. Bad weather, pests, and diseases can ruin crops and sicken livestock, which can dramatically lower gross income. In addition, farmers can make voluntary choices that alter their reported gross income. Examples include increasing inventories by delaying sales of goods produced

⁹Operators can use depreciation expenses to offset income for tax purposes. If high enough, depreciation expenses can cause some farms to claim losses from farming during a year, even if revenues cover all operating costs. In 2006, 18 percent of farms with sales between \$10,000 and \$50,000 had depreciation expenses that outweighed their revenues, as did 11 percent of farms with sales between \$1,000 and \$10,000. Fewer than 1 percent of farms with sales below \$1,000 had depreciation expenses larger than their net cash farm income, which could be due to the fact that many of these small farms may not qualify as a business for Internal Revenue Service purposes.

na indicates value is not available due to no observations, an undefined statistic, or reliability concerns.

and purchasing farm equipment, which increases depreciation and can shield income from taxes.

Acres operated

Despite their low levels of production, farms with less than \$50,000 in sales accounted for more than one-fourth of the acres operated in the U.S. (fig. 6, table 1). In contrast, farms with sales of at least \$250,000 produced the bulk of U.S. agricultural output on just over 40 percent of all acres operated.

Relative to the distribution of sales, acres operated are distributed much more evenly across all farm size classes for at least four reasons:

- 1. Large livestock operations such as feedlots and operations producing hogs, dairy products, eggs, or broilers (among other types) tend to confine their animals and use purchased feed, meaning that many do not use much land to produce large volumes of sales.
- 2. Modestly sized livestock operations often specialize in the production of calves, horses, or sheep or goats, and are more likely to graze their livestock rather than confine them. This requires larger tracts of land per head to feed the animals, but does not generate the high levels of revenues and output that higher sales farms generate.
- Farmland can include Conservation Reserve Program (CRP) acres in addition to cropland and pastureland. Operators often enroll entire fields in CRP, and can own more acres than their limited sales and expenses would suggest.¹⁰
- 4. Ownership of land may be the primary goal of many small/medium sized farms, rather than farm income.

While acres operated are distributed fairly evenly across sales categories, acres owned are distributed more evenly still. In fact, farms with less than \$10,000 in sales tend to own more land than they operate, choosing to rent a

¹⁰For more information on land use, see table 1.3.10 of the ERS report Agricultural Resources and Environmental Indicators: Land Ownership and Farm Structure (July 2002), available at: www. ers.usda.gov/publications/arei/ah722/arei1_3/DBGen.htm/.

Figure 6 **Acres operated, 2006**



portion of their land to other operations. Farmers of larger operations, generally requiring larger amounts of land for production, often rent land from others. On average, farmers with at least \$250,000 in sales in 2006 owned less than half the land they operated.

Again, however, aggregate statistics can prove misleading. While aggregate acres owned or operated are relatively evenly distributed across farm sales classes, the median number of acres operated differs dramatically. Half of farms with sales between \$10,000 and \$50,000 operated fewer than 164 acres, while half of farms with between \$250,000 and \$500,000 in agricultural sales operated more than 825 acres. Half of the very largest farms, those with \$500,000 or more in sales, operated over 1,200 acres.

Government payments

U.S. farm programs can be categorized into two broad groups: commodity-related and conservation. Commodity payments in particular tend to reflect production volumes for program commodities (largely feed and food grains, cotton, and oilseeds). As a result, larger farms producing greater volumes of program commodities tend to receive higher levels of commodity payments. In 2006, operations generating over \$250,000 worth of sales collected the bulk of commodity-related government payments.

Despite increases in working-land program budgets, in 2006 conservation payments consisted mostly of CRP payments—a program designed to retire environmentally sensitive cropland from production (see box, "Farm Program Payments: Types and Data Source"). Many CRP participants enroll a significant portion, if not all, of their cropland into CRP, yet are still counted as farms by USDA because government payments are counted as farm sales under the farm definition. These farms focus on the production of environmental benefits and have little or no production of farm commodities, so the bulk of their farm income comes from CRP payments. As such, operations selling less than \$50,000 received most of the conservation-related government payments (fig. 7).

Overall, farms generating at least \$250,000 in sales collected just over 53 percent of all government payments, while those farms generating less than \$50,000 in sales collectively received approximately 18 percent. However, these smaller operations enrolled almost 65 percent of all the acres enrolled in either the CRP or the Wetlands Reserve Program (WRP), both of which target environmentally sensitive land rather than production.

Farm Program Payments: Types and Data Source

The 2006 Agricultural Resource Management Survey covers:

- 1. Commodity-related payments. Direct payments, countercyclical payments, loan deficiency payments, marketing loan gains, net value of commodity certificates, milk income loss contract payments, agricultural disaster payments, and any other State, Federal, and local payments are included. Goals: Establish price and farm income support, stabilize production, provide a safety net for farmers.
- 2. Conservation payments. Conservation payments belong to one of two categories:
 - Payments from land retirement programs, including the Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP), and Wetlands Reserve Program (WRP). Goals: Remove land from agricultural production.
 - Payments from working-land programs, including the Environmental Quality Incentives Program
 (EQIP), and Conservation Security Payments (CSP). These programs provide technical and financial assistance to farmers who install or maintain conservation practices on land in production.
 Goals: Protect and preserve natural resources including (among other objectives): maintaining and
 improving soil quality, improving wildlife habitat, and improving water and air quality. Additionally,
 conservation programs provide a safety net for farmers and help establish farm income support.

The Agricultural Resource Management Survey (ARMS) allows for analysis of how farm program payments are distributed among farms because the survey can identify both participating and nonparticipating farms. Unlike other data sources, ARMS furnishes detailed information on the farms' characteristics as well as the characteristics of farm operators and their households. Since ARMS contacts only farm operators, however, it excludes the payments made to people who do not farm, mainly nonoperator landlords.

Percent of U.S. total 40 Total Conservation Commodity-related 35 30 25 20 15 10 5 0 <\$1,000 \$1,000-\$10,000-\$50,000-\$100,000-\$175,000-\$250,000-\$500,000+ \$9.999 \$49.999 \$99.999 \$174,999 \$249.999 \$499,999

Figure 7

Government payments, 2006

Source: USDA, Agricultural Resource Management Survey, 2006.

Sales class